

Highlights

Overview

This issue of the *Natural Gas Monthly* contains estimates for January 1999 for many natural gas data series at the national level. Estimates of national natural gas prices are available through October 1998 for most series. Highlights of the data contained in this issue are:

- The level of working gas in underground natural gas storage facilities is estimated to be 2,073 billion cubic feet at the end of January 1999, significantly higher at this point in the heating season (November through March) than in recent years.
- Higher natural gas consumption in January 1999 relative to January 1998 is the result of relatively low consumption during January 1998 when temperatures were generally warmer than normal.
- The average decline in the national average wellhead price for January through October 1998 has been passed on to downstream consumers, but the impact varies by end-use sector.

Supply

Steady production and ample supplies both in underground storage and from imports have easily met the demand for natural gas in January 1999. Dry natural gas production in January 1999 is estimated to be 1,618 billion cubic feet (Table 1), virtually the same as for January in the previous 2 years and almost 2 percent higher than in January 1996 (Figure HI1). Net imports of natural gas in January 1999 are estimated to be 273 billion cubic feet, 2 percent higher than in January 1998 (Table 2).

Net withdrawals of natural gas from underground storage facilities are estimated to be 650 billion cubic feet during January 1999 (Table 10). This is 39 percent higher than a year ago, but the weather in January 1998 was much warmer than normal, with 20 percent fewer-than-normal heating degree days on average. Thus, the demand for natural gas to meet space-heating needs was less in January 1998 than in January 1999. The level of working gas, which began the 1998-99 heating season at its highest level since 1992, is estimated to be 2,073 billion cubic feet at the end of January 1999 (Figure HI2). This is

21 percent higher than at the end of January 1998 and 39 percent higher than at the end of January 1997.

End-Use Consumption

End-use consumption of natural gas in January 1999 is estimated to be 2,343 billion cubic feet, 5 percent higher than in January 1998 (Table 3). Warmer-than-normal weather during January 1998 contributes to this difference. Consumption in January 1999 is virtually the same as in January 1997 and is 2 percent lower than in January 1996 (Figure HI3). The residential and commercial sectors, where most natural gas is used for space heating, both had higher consumption in January 1999 than in January 1998. Residential and commercial consumption in January 1999 are estimated to be 887 and 491 billion cubic feet, respectively, both 10 percent higher than in January 1998. Industrial consumption of natural gas is estimated to be 782 billion cubic feet in January 1999, 2 percent lower than a year earlier.

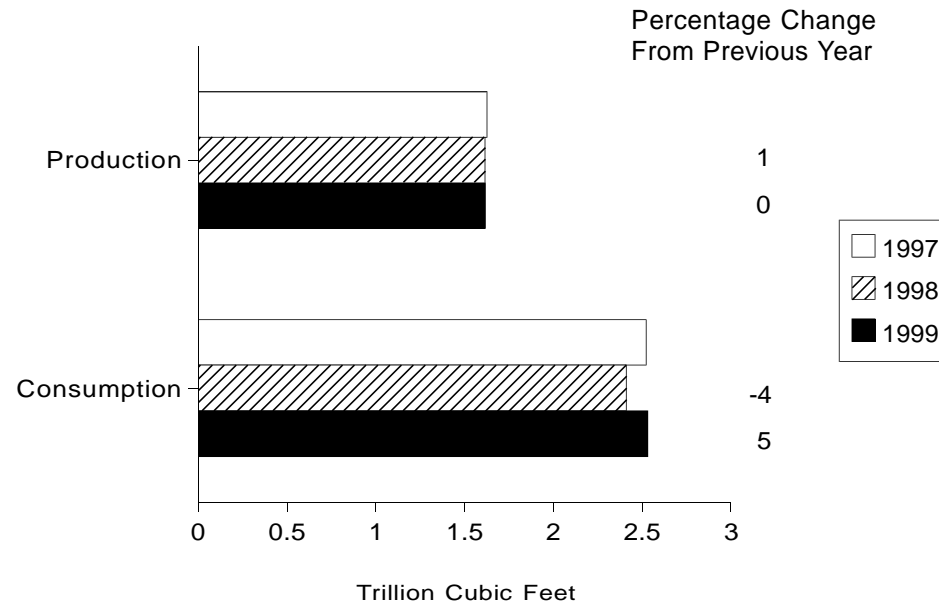
Information on the consumption of natural gas by electric utilities is available only through October 1998. Cumulatively in 1998, electric utility consumption is estimated to be 2,894 billion cubic feet or 12 percent higher than during the same period in 1997. Data estimates continue to support the expectation that the electric utility sector is the only end-use sector to see an increase in natural gas consumption from 1997 to 1998. Consumption in the other sectors in 1998 is estimated to be 4 to 9 percent lower than in 1997.

Prices

Cumulative natural gas prices in 1998 are averaging lower than in 1997. Monthly price estimates are available through October 1998 for all price series except electric utilities, which are available through September. The cumulative average wellhead price in 1998 is estimated to be \$1.90 per thousand cubic feet, \$0.37 (16 percent) lower than for the same period in 1997 (Table 4).¹ This has translated into lower prices for all the other series provided in the *Natural Gas Monthly* (Figure HI4), although the impact varies by series.

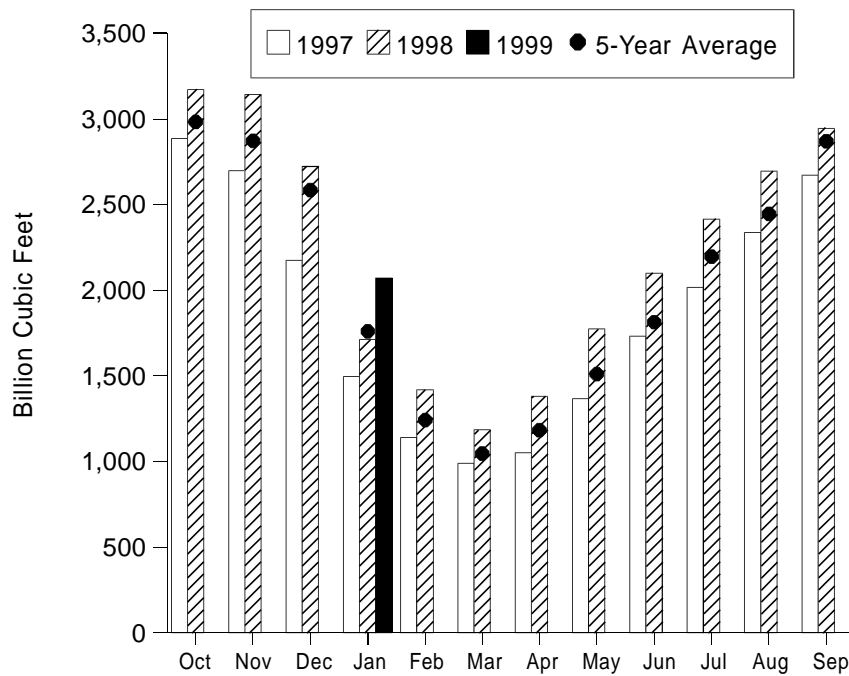
¹End-use prices in the residential, commercial, and industrial sectors are for onsystem gas sales only. While monthly onsystem sales are nearly 100 percent of residential deliveries, in 1998 they have been from 47 to 72 percent of commercial deliveries and only 13 to 17 percent of industrial deliveries (Table 4).

Figure HI1. Natural Gas Production and Consumption, January, 1997-1999



Source: Table 2.

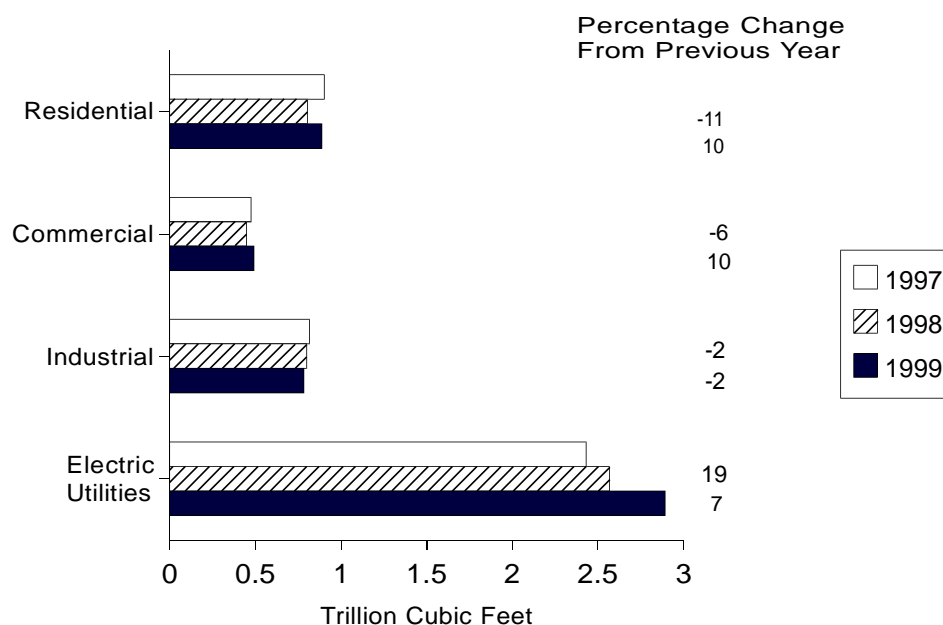
Figure HI2. Working Gas in Underground Storage in the United States, 1997-1999



Note: The 5-year average is calculated using the latest available monthly data. For example, the December average is calculated from December storage levels for 1993 to 1997 while the January average is calculated from January levels for 1994 to 1998. Data are reported as of the end of the month, thus October data represent the beginning of the heating season.

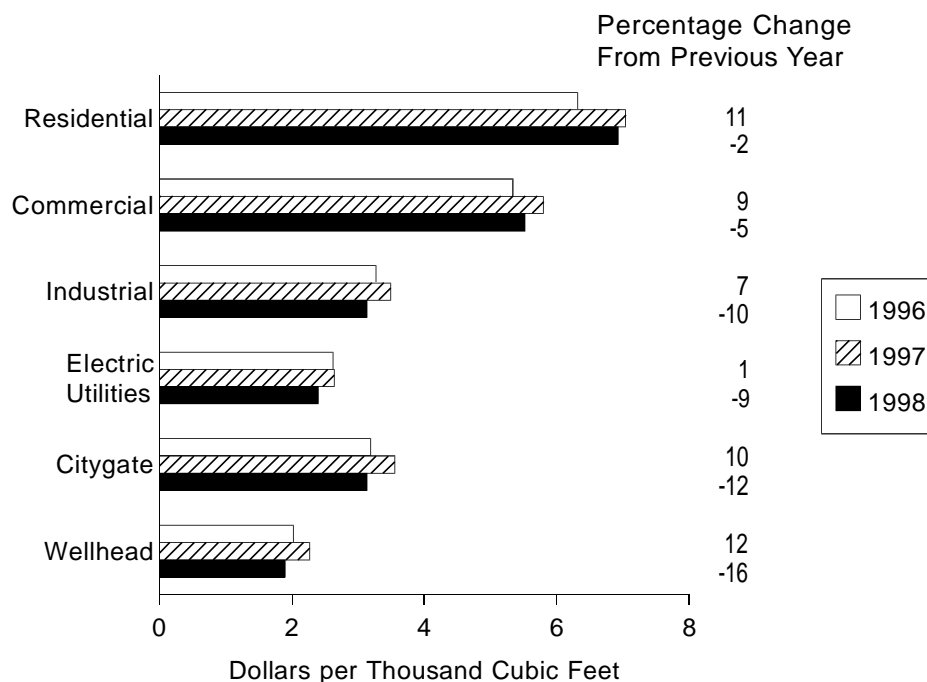
Sources: Form EIA-191, "Underground Natural Gas Storage Report," Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition," and Short-Term Integrated Forecasting System.

Figure HI3. Natural Gas Delivered to Consumers, January, 1997-1999



Note: The reporting of electric utility deliveries is 3 months behind the reporting of other deliveries.
Source: Table 3.

Figure HI4. Average Delivered and Wellhead Natural Gas Prices, January-October 1996-1998



Note: Commercial and industrial average prices reflect onsystem sales only. The reporting of electric utility prices is 1 month behind the reporting of other prices..
Source: Table 4.

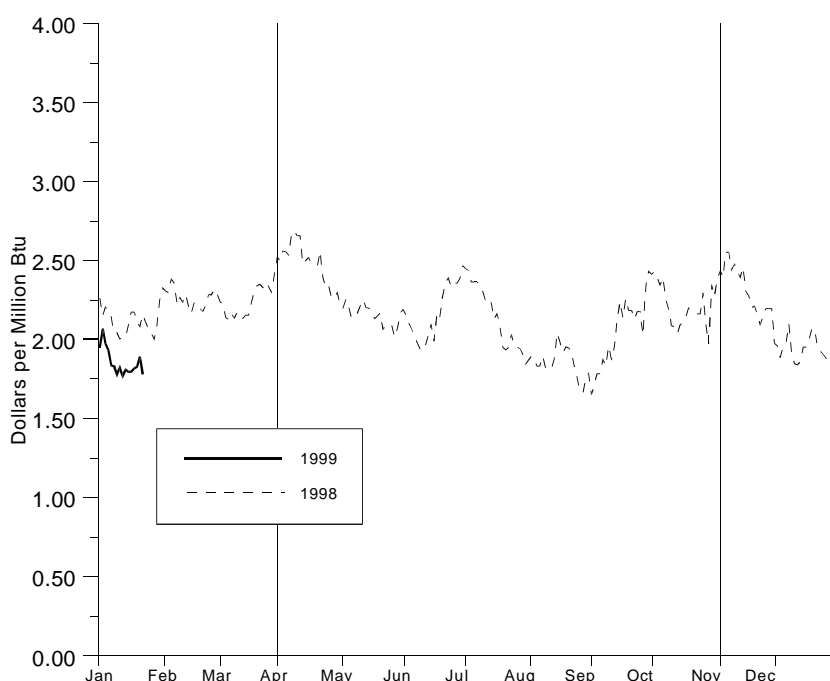
The cumulative average city gate price for January through October 1998 is estimated to be \$3.13 per thousand cubic feet, \$0.42 (12 percent) lower than for the same period in 1997. Residential users have seen the least impact from the drop in the average wellhead price. On average, residential customers paid an estimated \$6.93 per thousand cubic feet for natural gas through October 1998, only \$0.11 (2 percent) less than in 1997. Commercial and industrial customers paid \$0.28 (5 percent) and \$0.36 (10 percent) less for natural gas, respectively, in 1998 than in 1997. The estimated commercial and industrial prices through October 1998 are \$5.52 and \$3.13 per thousand cubic feet, respectively. The average price paid for natural gas by electric utilities is also lower in 1998. The average price through September is estimated to be \$2.40 per thousand cubic feet, \$0.24 (9 percent) lower than in 1997.

In the futures market, prices at the Henry Hub were fairly stable throughout 1998 and did not experience any sustained periods with exceptionally high prices (Figure HI5). The daily settlement price for the nearby month contract was in the range of \$1.652 to \$2.689 per million

Btu throughout the year. During 1996 and 1997, the lower end of the range was similar to that of 1998, but the highest prices were significantly above those of 1998. In 1996, the weather in November (the beginning of the 1996-97 heating season) had been colder than normal, and in 1997, demand for natural gas increased in the Southwest in the late summer as some electric utilities experienced problems with coal delivery and switched to gas. Both factors pushed prices higher in the futures market at that time. In 1996, the range of daily nearby month settlement prices at the Henry Hub was \$1.764 to \$4.573 per million Btu, and in 1997 it was \$1.780 to \$3.785. Both years experienced several weeks with futures prices over \$3.00.

At the beginning of 1999, the futures price has been generally below \$2.00 per million Btu settling at \$1.778 on January 22 (February contract). The daily average spot price at the Henry Hub, after falling nearly 50 percent below the futures price in early December 1998, has remained within a few cents of the futures price since late that month.

Figure HI5. Daily Futures Settlement Prices at the Henry Hub



Note: The futures price is for the nearby month contract, that is, for the next contract to terminate trading. Contracts are traded on the New York Mercantile Exchange. April 1 is the beginning of the natural gas storage refill season. November 1 is the beginning of the heating season.

Source: Commodity Futures Trading Commission, Division of Economic Analysis.